

KENTUCKY RETIREMENT SYSTEMS





To: KRS Board of Trustees

From: Richard Robben, Executive Director of Investments

Date: May 16th, 2019

Subject: Report on Recent Investment Committee Activities

Investment Activity

New Investments

None

Asset Allocation

				K	RS - PE	N	SION FUND A	LI	LOCATIONS				5/3/2019	
Cotomoni				KERS - P	EN									
Category		Market Value		Actual Target			Market Diff		Market Value	Actual	Target	Diff	Market Diff	
Growth	\$	1,200,139,033	56.2°	6 53.50%	2.7%		56,952,086		\$ 433,622,625	64.3%	62.50%	1.8%	\$ 11,982,100	
US Equity	\$	336,926,966	15.89	6 15.75%	0.0%	\$	381,276		\$ 126,761,475	18.8%	18.75%	0.0%	\$ 269,318	
Non-US Equity	\$	365,849,154	17.19	6 15.75%	1.4%		29,303,464		\$ 137,559,005	20.4%	18.75%	1.6%	\$ 11,066,848	
Private Equity	\$	201,635,895	9.49	6 7.00%	2.4%	\$	52,060,033		\$ 60,553,052	9.0%	10.00%	-1.0%	\$ (6,909,432)	
High Yield/Specialty Credit	\$	295,727,017	13.89	6 15.00%	-1.2%	\$	(24,792,688)		\$ 108,749,093	16.1%	15.00%	1.1%	\$ 7,555,367	
Liquidity	\$	638,032,975	29.9	6 23.50%	6.4%	\$	135,885,437		\$ 143,136,109	21.2%	14.50%	6.7%	\$ 45,315,507	
Core Fixed Income	\$	472,614,971	22.19	6 20.50%	1.6%	\$	34,571,375		\$ 111,028,640	16.5%	13.50%	3.0%	\$ 19,954,287	
Cash	\$	165,418,003	7.79	6 3.00%	4.7%	\$	101,314,062		\$ 32,107,468	4.8%	1.00%	3.8%	\$ 25,361,220	
Diversifying Strategies	\$	296,795,819	13.9	6 23.00%	-9.1%	\$	(194,667,728)		\$ 96,341,161	14.3%	23.00%	-8.7%	\$ (58,822,553)	
Real Return	\$	164,212,250	7.79	6 15.00%	-7.3%	\$	(156,307,455)		\$ 56,566,554	8.4%	15.00%	-6.6%	\$ (44,627,172)	
Real Estate	\$	75,577,649	3.59	6 5.00%	-1.5%	\$	(31,262,252)		\$ 24,083,313	3.6%	5.00%	-1.4%	\$ (9,647,929)	
Abs Ret / Opportunistic	\$	57,005,920	2.79	6 3.00%	-0.3%	\$	(7,098,021)		\$ 15,691,294	2.3%	3.00%	-0.7%	\$ (4,547,451)	
Miscellaneous	\$	1,830,205	0.19	6 0.00%	0.1%	\$	1,830,205		\$ 1,524,946	0.2%	0.00%	0.2%	\$ 1,524,946	
TOTAL PORTFOLIO		\$2,136,798,031							\$674,624,840					
Category				CERS - P	EN					CE	RSH - PEN			
Category		Market Value	Actua	I Target	Diff		Market Diff		Market Value	Actual	Target	Diff	Market Diff	
Growth		\$4,653,214,345	65.3°	62.50%	2.8%	\$	201,109,625		\$1,555,617,164	65.1%	62.50%	2.6%	\$ 61,024,650	
US Equity		\$1,344,147,880	18.99	6 18.75%	0.1%	\$	8,516,463		\$ 448,625,828	18.8%	18.75%	0.0%	\$ 248,074	
Non-US Equity		\$1,499,029,291	21.09	6 18.75%	2.3%	\$	163,397,875		\$ 501,030,087	21.0%	18.75%	2.2%	\$ 52,652,333	
Private Equity		\$657,172,669	9.29	6 10.00%	-0.8%	\$	(55,164,086)		\$ 224,379,890	9.4%	10.00%	-0.6%	\$ (14,754,912)	
High Yield/Specialty Credit		\$1,152,864,506	16.29	6 15.00%	1.2%	\$	84,359,373		\$ 381,581,359	16.0%	15.00%	1.0%	\$ 22,879,155	
Liquidity		\$1,391,592,959	19.5°	% 14.50%	5.0%	\$	358,704,664		\$477,194,008	20.0%	14.50%	5.5%	\$ 130,448,545	
Core Fixed Income		\$1,194,447,424	16.89	6 13.50%	3.3%	\$	232,792,804		\$ 392,884,769	16.4%	13.50%	2.9%	\$ 70,052,787	
Cash		\$197,145,536	2.89	6 1.00%	1.8%	\$	125,911,860		\$ 84,309,238	3.5%	1.00%	2.5%	\$ 60,395,758	
Diversifying Strategies		\$1,077,044,915	15.19	6 23.00%	-7.9%	\$	(561,329,622)		\$ 356,761,192	14.9%	23.00%	-8.1%	\$ (193,248,854)	
Real Return		\$625,477,768	8.89	6 15.00%	-6.2%	\$	(443,027,365)		\$ 213,171,633	8.9%	15.00%	-6.1%	\$ (145,530,570)	
Real Estate		\$269,044,026	3.89	6 5.00%	-1.2%	\$	(87,124,352)		\$ 84,985,657	3.6%	5.00%	-1.4%	\$ (34,581,744)	
Abs Ret / Opportunistic		\$182,523,121	2.69	6 3.00%	-0.4%	\$	(31,177,906)		\$ 58,603,901	2.5%	3.00%	-0.5%	\$ (13,136,539)	
Miscellaneous		\$1,515,333	0.09	6 0.00%	0.0%	\$	1,515,333		\$ 1,775,659	0.1%	0.00%	0.1%	\$ 1,775,659	
TOTAL PORTFOLIO		\$7,123,367,552							\$2,391,348,022					

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Category		Market Value	Actual Target		Diff	Market Diff		Market Value	Actual	Target	Diff		Market Diff
Growth		\$153,756,965	55.9%	53.50%	2.4%	\$ 6,673,545		\$ 7,996,350,131	63.5%	60.8%	2.7%	\$	337,742,006
US Equity	\$	43,392,740	15.8%	15.75%	0.0%	\$ 92,481		\$ 2,299,854,889	18.3%	18.2%	0.1%	\$	9,507,613
Non-US Equity	\$	48,325,329	17.6%	15.75%	1.8%	\$ 5,025,070		\$ 2,551,792,866	20.3%	18.2%	2.1%	\$	261,445,589
Private Equity	\$	19,143,811	7.0%	7.00%	0.0%	\$ (100,749)		\$ 1,162,885,317	9.2%	9.4%	-0.2%	\$	(24,869,147)
High Yield/Specialty Credit	\$	42,895,085	15.6%	15.00%	0.6%	\$ 1,656,743		\$ 1,981,817,059	15.7%	15.0%	0.7%	\$	91,657,950
Liquidity		\$81,716,372	29.7%	23.50%	6.2%	\$ 17,109,636		\$ 2,731,672,422	21.7%	16.2%	5.5%	\$	687,463,788
Core Fixed Income	\$	64,395,264	23.4%	20.50%	2.9%	\$ 8,036,197		\$ 2,235,371,069	17.7%	14.8%	2.9%	\$	365,407,449
Cash	\$	17,321,108	6.3%	3.00%	3.3%	\$ 9,073,439		\$ 496,301,353	3.9%	1.4%	2.6%	\$	322,056,339
Diversifying Strategies	\$	39,090,169	14.2%	23.00%	-8.8%	\$ (24,141,956)		\$ 1,866,033,255	14.8%	23.0%	-8.2%	\$ (1,032,210,712)
Real Return	\$	22,566,193	8.2%	15.00%	-6.8%	\$ (18,672,149)		\$ 1,081,994,398	8.6%	15.0%	-6.4%	\$	(808, 164, 711)
Real Estate	\$	10,221,329	3.7%	5.00%	-1.3%	\$ (3,524,785)		\$ 463,911,974	3.7%	5.0%	-1.3%	\$	(166,141,062)
Abs Ret / Opportunistic	\$	6,302,647	2.3%	3.00%	-0.7%	\$ (1,945,022)		\$ 320,126,884	2.5%	3.0%	-0.5%	\$	(57,904,938)
Miscellaneous	\$	358,775	0.1%	0.00%	0.1%	\$ 358,775		\$ 7,004,918	0.1%	0.0%	0.1%	\$	7,004,918
TOTAL PORTFOLIO		\$274,922,280						\$12,601,060,726					

Insurance Plans

				K	OC INI	61	ID ANCE EII	ND	ALLOCATIONS					5/3/2019	
			V	ERS - INS		30	RANCE FU	שאו	ALLOCATIONS	VED	SH - INS			3/3/2019	
Category		Market Value		Target	Diff		Market Diff		Market Value	Actual		Diff		Market Diff	
Growth	\$	583,495,591	64.4%	62.50%	1.9%		17,011,939	•			62.50%	3.4%		17,731,985	
US Equity	\$	184,998,343	20.4%	18.75%	1.7%	_	15,053,248	- 5			18.75%	0.3%	-	1,511,066	
Non-US Equity	\$	198,929,774		18.75%	3.2%		28,984,679				18.75%	2.4%	•	12,504,748	
Private Equity	\$	46,299,938	5.1%	10.00%	-4.9%		(44,337,446)	- 3			10.00%	-0.1%	•	(694,087)	
High Yield/Specialty Credit	\$	153,267,535	16.9%		1.9%		17,311,458	3			15.00%	0.8%		4,410,259	
Liquidity	\$	198,138,976	21.9%	14.50%	7.4%	_	66,714,769	9			14.50%	4.4%		22,909,950	
Core Fixed Income	\$	134,499,130	14.8%	13.50%	1.3%	_	12,138,661	9			13.50%	2.5%	-	13,289,955	
Cash	\$	63,639,845	7.0%	1.00%	6.0%		54,576,107		14,837,209	2.8%		1.8%		9,619,995	
Diversifying Strategies	\$	124,772,662	13.8%	23.00%	-9.2%	_	(83,693,322)	9			23.00%	-7.8%		(40,622,400)	
Real Return	\$	73,977,340	8.2%	15.00%	-6.8%	_	(61,978,736)	9,			15.00%	-6.6%	_	(34,227,037)	
Real Estate	\$	28,334,183	3.1%	5.00%	-1.9%	_	(16,984,509)	9		4.0%		-1.0%		(5,310,010)	
Abs Ret / Opportunistic	\$	22,461,139	2.5%	3.00%	-0.5%	\$	(4,730,077)	9		2.8%	3.00%	-0.2%		(1,085,353)	
Miscellaneous	\$	(33,386)	0.0%	0.00%	0.0%		(33,386)	- 5		0.0%		0.0%		(19,536)	
TOTAL PORTFOLIO	\$	906,373,843		. ,,,,	,,		(22,230)			2.270		2.2.0	•	(12,230)	
	Ť	,							,,500				\$	17,731,985	
			C	ERS - INS						CER	SH - INS		Ψ	17,751,303	
Category		Market Value		Target	Diff		Market Diff		Market Value	Actual	Target	Diff		Market Diff	
Growth		\$1,597,428,359	65.6%	62.50%	3.1%		74,328,101		\$864,060,578	66.2%		3.7%		48,597,566	
US Equity	\$	458,145,402	18.8%	18.75%	0.0%	_	1,215,324	- 5			18.75%	0.0%	-	201,460	
Non-US Equity	\$	501,752,802	20.6%	18.75%	1.8%	•	44,822,725		, ,		18.75%	2.1%	•	27,283,009	
Private Equity	\$	277,461,908	11.4%	10.00%	1.4%		33,765,867	3			10.00%	2.0%		25,687,824	
High Yield/Specialty Credit	\$	360,068,248	14.8%	15.00%	-0.2%		(5,475,814)		191,136,395		15.00%	-0.4%		(4,574,727)	
Liquidity	Ţ	\$474,119,447	19.5%	14.50%	5.0%	_	120,760,187		\$245,916,676	18.8%		4.3%	_	56,729,258	
Core Fixed Income	\$	375,626,815	15.4%	13.50%	1.9%	_	46,637,160	9			13.50%	1.9%		25,115,308	
Cash	\$	98,492,632	4.0%	1.00%	3.0%		74,123,027	- 5		3.4%	1.00%	2.4%		31,613,949	
Diversifying Strategies	\$	365,503,341	15.0%	23.00%	-8.0%		(194,997,554)	9			23.00%	-8.1%	-	(105,278,100)	
Real Return	\$	211,910,893	8.7%	15.00%		\$	(153,633,169)	9			15.00%	-6.5%	•	(85,456,910)	
Real Estate	\$	90,174,340	3.7%	5.00%	-1.3%		(31,673,680)		49,382,967	3.8%		-1.2%		(15,854,074)	
Abs Ret / Opportunistic	\$	63,418,108	2.6%	3.00%	-0.4%	\$	(9,690,705)	9		2.7%	3.00%	-0.3%	\$	(3,967,116)	
Miscellaneous	\$	(90,734)	0.0%	0.00%	0.0%	\$	(90,734)	9	(48,724)	0.0%	0.00%	0.0%	\$	(48,724)	
TOTAL PORTFOLIO	\$	2,436,960,413					, ,							, ,	
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			S	PRS - INS					INSURANCE TOTAL FUND						
Category		Market Value		Target	Diff		Market Diff		Market Value	Actual	Target	Diff	-	Market Diff	
Growth		\$131,304,527	66.9%	62.50%	4.4%		8,722,855	9		65.6%		3.1%		166,392,447	
US Equity	\$	37,372,266	19.1%	18.75%	0.3%	_	597,765	9			18.75%	0.3%	•	18,578,863	
Non-US Equity	\$	41,038,829	20.9%	18.75%	2.2%		4,264,327		1,123,970,820		18.75%	2.2%		117,859,488	
Private Equity	\$	23,596,833	12.0%	10.00%	2.0%	_	3,983,766	3		10.3%	10.0%	0.3%		18,405,923	
High Yield/Specialty Credit	\$	29,296,599	14.9%	15.00%	-0.1%		(123,002)	9		15.2%	15.0%	0.2%		11,548,173	
Liquidity		\$36,167,223	18.4%	14.50%	3.9%	_	7,728,275	9		19.6%		5.1%	_	274,842,438	
Core Fixed Income	\$	29,969,274	15.3%	13.50%	1.8%	_	3,491,633	9		15.4%	13.5%	1.9%	_	100,672,718	
Cash	\$	6,197,948	3.2%	1.00%	2.2%		4,236,642		227,828,991	4.2%	1.0%	3.2%		174,169,720	
Diversifying Strategies	\$	28,666,248	14.6%	23.00%	-8.4%		(16,443,807)	9		14.8%	23.0%	-8.2%		(441,035,184)	
Real Return	\$	15,301,953	7.8%	15.00%	-7.2%		(14,117,648)	9		8.5%	15.0%	-6.5%		(349,413,500)	
Real Estate	\$	7,931,183	4.0%	5.00%	-1.0%		(1,875,351)	9		3.7%	5.0%	-1.3%		(71,697,624)	
Abs Ret / Opportunistic	\$	5,433,111	2.8%	3.00%	-0.2%	\$	(450,809)	9	, , , , , , , , , , , , , , , , , , , ,	2.6%	3.0%	-0.4%	\$	(19,924,060)	
Miscellaneous	\$	(7,323)	0.0%	0.00%	0.0%	•	(7,323)	9		0.0%	0.0%	0.0%		(199,702)	
TOTAL PORTFOLIO	\$	196,130,674	/ 4			Ť	,,,,,,,				, ,	, ,		, , ==/	
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Performance

Recently, performance has been below our benchmarks. In order to determine the source, I found that BNY had been using incorrect plan allocations for several of our plans. BNY has been instructed to correct these errors. Once complete, relative performance can be restated if desired. (It's important to note that these errors did *NOT* affect the actual plan performance marks. They were simply errors in the various weights of assets classes for several plans.)

We will also be making a change to the Fixed Income benchmarks for each plan. Prior to our establishment of 2 separate pools of fixed income assets (Core and Specialty Finance / High Yield), all plans used a simple 50%/50% blend of the Barclays Bloomberg US Universal Index and the Barclay's Bloomberg US High Yield Index. Late last year we established our Core Fixed Income allocation, and hired Loomis Salyes and Lord Abbett to complete our Core allocation along with our existing NISA mandate. The benchmarks for these mandates are the Barclay's US Aggregate (NISA), the Barclay's Bloomberg US Intermediate Aggregate (Loomis), and the Barclay's Bloomberg 1-3yr US Credit Index (Lord Abbett). Since the Lord Abbett and Loomis benchmarks are a subset of the US Aggregate, we are planning to change the benchmark for the Core Allocation to the Barclay's Bloomberg US Aggregate.

For the Specialty Finance / High Yield allocation, we believe that the best benchmark would be a 50%/50% blend of the Barclay's Bloomberg US High Yield Index, and the S&P LSTA Leveraged Loan Index. As we continue to build out this allocation, I anticipate that roughly 50% of these assets will be in floating rate securities, so the Leveraged Loan Index is a much better representation of the risk and return potential of these mandates. Additionally, since we funded the last portion of the Core allocation at the beginning of the year, I would like to ask BNY to make these changes retroactive to January 1st, 2019.

March 2019 Performance

Performance: PENSION (Net of Fees)											
	Mar-19	FYTD	1Yr	3Yr	5Yr						
Total Pension Fund	0.61%	2.92%	3.73%	8.70%	5.91%						
Allocation Index	0.82%	3.38%	4.09%	8.78%	6.06%						
Value Add	-0.21%	-0.46%	-0.36%	-0.08%	-0.15%						
IPS Benchmark	0.84%	3.52%	4.46%								
Value Add	-0.23%	-0.60%	-0.73%								
KERS	0.36%	3.07%	3.75%	7.95%	5.49%						
Allocation Index	0.95%	3.64%	4.38%	8.25%	5.74%						
Value Add	-0.59%	-0.57%	-0.63%	-0.30%	-0.25%						
IPS Benchmark	0.97%	3.57%	4.43%								
Value Add	-0.61%	-0.50%	-0.68%								
Assumed Rate of Return	0.43%	3.91%	5.25%								
Value Add	-0.07%	-0.84%	-1.50%								

KERS-HAZ	0.61%	2.81%	3.61%	8.67%	5.93%
Allocation Index	0.79%	3.34%	4.06%	8.93%	5.94%
Value Add	-0.18%	-0.53%	-0.45%	-0.26%	-0.01%
IPS Benchmark	0.58%	3.71%	4.66%		
Value Add	0.03%	-0.90%	-1.05%		
Assumed Rate of Return	0.51%	4.65%	6.25%		
Value Add	0.10%	-1.84%	-2.64%		
CERS	0.66%	2.83%	3.65%	8.84%	5.97%
Allocation Index	0.79%	3.34%	4.06%	8.96%	5.93%
Value Add	-0.13%	-0.51%	-0.41%	-0.12%	0.04%
IPS Benchmark	0.58%	3.71%	4.66%		
Value Add	0.08%	-0.88%	-1.01%		
Assumed Rate of Return	0.51%	4.65%	6.25%		
Value Add	0.15%	-1.82%	-2.60%		
CERS-HAZ	0.68%	2.85%	3.70%	8.82%	6.01%
Allocation Index	0.79%	3.34%	4.06%	8.95%	5.93%
Value Add	-0.11%	-0.49%	-0.36%	-0.13%	0.08%
IPS Benchmark	0.58%	3.71%	4.66%		
Value Add	0.10%	-0.86%	-0.96%		
Assumed Rate of Return	0.51%	4.65%	6.25%		
Value Add	0.17%	-1.80%	-2.55%		
SPRS	0.65%	2.97%	3.65%	8.12%	5.32%
Allocation Index	0.95%	3.53%	4.20%	8.50%	5.70%
Value Add	-0.30%	-0.56%	-0.55%	-0.38%	-0.38%
IPS Benchmark	0.97%	3.53%	4.43%		
Value Add	-0.32%	-0.56%	-0.78%		
Assumed Rate of Return	0.43%	3.91%	5.25%		
Value Add	0.22%	-0.94%	-1.60%		

Performance: INSURANCE (Net of Fees)											
	Mar-19	FYTD	1Yr	3Yr	5Yr						
Total Insurance Fund	0.71%	2.77%	3.75%	8.93%	6.07%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.07%	-0.54%	-0.48%	-0.23%	-0.08%						
IPS Benchmark	0.78%	3.60%	4.76%								
Value Add	-0.07%	-0.83%	-1.01%								
KERS-INS	0.65%	2.20%	2.89%	8.37%	5.57%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.13%	-1.11%	-1.34%	-0.79%	-0.58%						
IPS Benchmark	0.78%	3.60%	4.76%								
Value Add	-0.13%	-1.40%	-1.87%								
Assumed Rate of Return	0.51%	4.65%	6.25%								
Value Add	0.14%	-2.45%	-3.36%								
KERSH-INS	0.70%	2.71%	3.64%	8.87%	5.99%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.08%	-0.60%	-0.59%	-0.29%	-0.16%						
IPS Benchmark	0.78%	3.60%	4.76%								
Value Add	-0.08%	-0.89%	-1.12%								
Assumed Rate of Return	0.51%	4.65%	6.25%								
Value Add	0.19%	-1.94%	-2.61%								
CERS-INS	0.73%	2.83%	3.86%	9.00%	6.14%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.05%	-0.48%	-0.37%	-0.16%	-0.01%						
IPS Benchmark	0.78%	3.60%	4.75%								
Value Add	-0.05%	-0.77%	-0.89%								
Assumed Rate of Return	0.51%	4.65%	6.25%								
Value Add	0.22%	-1.82%	-2.39%								
CERSH-INS	0.73%	2.87%	3.92%	9.05%	6.20%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.05%	-0.44%	-0.31%	-0.11%	0.05%						
IPS Benchmark	0.78%	3.60%	4.75%								
Value Add	-0.05%	-0.73%	-0.83%								
Assumed Rate of Return	0.51%	4.65%	6.25%								
Value Add	0.22%	-1.78%	-2.33%								
SPRS-INS	0.67%	2.83%	3.86%	9.04%	6.16%						
Allocation Index	0.78%	3.31%	4.23%	9.16%	6.15%						
Value Add	-0.11%	-0.48%	-0.37%	-0.12%	0.01%						
IPS Benchmark	0.78%	3.60%	4.75%								
Value Add	-0.11%	-0.77%	-0.89%								
Assumed Rate of Return	0.51%	4.65%	6.25%								
Value Add	0.16%	-1.82%	-2.39%								

Investment Guideline Waivers

The Investment Committee granted 3 guideline waivers at the February 6th meeting and agreed to review each of these waivers at all subsequent meetings. Two of these waivers are still in effect:

- 1. Staff was granted a waiver of the requirement that each of our external investment managers should be visited annually on-site by KRS staff.
- 2. Staff was granted a waiver of the requirement to rebalance assets within the Absolute Return, Real Estate, and Fixed Income asset classes as the transition to our new asset allocation policy is ongoing.